



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---------------------------|---------------------------------|----------------------|---------------------|----------------------|--|
| 10/540,402 | 06/30/2006 | Yoram Groner | 2488.017 8368 | | |
| 23405 755 HESLIN ROTHE | 90 01/04/200 ENBERG FARLEY & | EXAMINER | | | |
| 5 COLUMBIA CIRCLE | | | SGAGIAS, MA | SGAGIAS, MAGDALENE K | |
| ALBANY, NY 12 | 2203 | | ART UNIT | PAPER NUMBER | |
| | | | 1632 | | |
| SHORTENED STATUTORY I | PERIOD OF RESPONSE | MAIL DATE | DELIVER | Y MODE | |
| 3 MONT | THS | 01/04/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| - | | Application No. | Applicant(s) | | | |
|--|--|---|--|--|--|--|
| Office Action Summary | | 10/540,402 | GRONER ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Magdalene K. Sgagias | 1632 | | | |
| | The MAILING DATE of this communication app | | | | | |
| Period for | Reply | | | | | |
| WHICI - Extens after S - If NO - Failure Any re | PRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DA sions of time may be available under the provisions of 37 CFR 1.13 itX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, ply received by the Office later than three months after the mailing dipatent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1)🛛 🗆 | Responsive to communication(s) filed on <u>30 Ju</u> | <u>ne 2006</u> . | | | | |
| | This action is FINAL . 2b) This action is non-final. | | | | | |
| 3) 🗌 🗧 | ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| , | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Dispositio | on of Claims | | | | | |
| 5) | Claim(s) <u>1-48</u> is/are pending in the application. (a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) <u>1-48</u> are subject to restriction and/or e | | | | | |
| Applicatio | on Papers | | | | | |
| 10)□ T | The specification is objected to by the Examiner The drawing(s) filed on is/are: a) acces Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Example. | epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj | e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d). | | | |
| Priority ui | nder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(| • | | | | | |
| 2) D Notice 3) D Inform | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | nte | | | |

Application/Control Number: 10/540,402

Art Unit: 1632

DETAILED ACTION

Previous Office Action, Restriction requirement mailed 12/14/06 has been vacated in light of the one below.

Claims 1-48 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I claim(s) 1-13, drawn to a method of inhibiting inflammation in a subject in need thereof, comprising contacting cells of the subject with an active agent that induces up-regulation of RUNX3 expression in the cells, wherein the active agent comprises a polynucleotide <u>encoding Runx3</u>.

Group II claim(s) 1-13, drawn to a method of inhibiting inflammation in a subject in need thereof, comprising contacting cells of the subject with an active agent that induces up-regulation of RUNX3 expression in the cells, wherein the active agent comprises a polynucleotide encoding Runx3 promoter activator.

Group III claim(s) 14-20, drawn to a method for <u>enhancing T cell-mediated immune response</u> in a subject in need thereof, comprising contacting cells with an active agent that down-regulates the expression of RUNX3 in cells, thereby enhancing the T cell-mediated immune response.

Group IV, claim(s) 21-28, drawn to a method of testing the efficacy of a treatment for a chronic inflammatory disease comparing subjecting a mouse that is homozygous for a RUNX3 null allele to a putative treatment and determining the efficacy of said treatment by measuring the severity of symptoms characteristic of said disease exhibited by said mouse, in comparison to the severity of symptoms exhibited by the same mice not exposed to the treatment.

Group V, claim(s) 29-38, drawn to a method of <u>predicting an increased risk</u> for a chronic inflammatory disease in a subject comparing the steps of: (a) obtaining a test sample from the

Application/Control Number: 10/540,402

Art Unit: 1632

subject to be assessed; and (b) determining the expression of RUNX3 in the sample, wherein when the expression of RUNX3 in said test sample is diminished compared to normal levels expressed in healthy subjects, said subject has an increased risk of susceptibility to a chronic inflammatory disease.

Group VI, claim(s) 39-43, drawn to method of testing the efficacy of a treatment for a chronic inflammatory disease comprising subjecting cells derived from a knock out mouse that is homozygous for a RUNX3 null allele to a putative treatment in vitro and determining the efficacy of said treatment.

Group VII, claim(s) 44-45, drawn to <u>a kit</u> for diagnosis of genetic susceptibility to a chronic inflammatory disease comprising at least one probe capable of determining at least one genotype associated with the RUNX3 gene, or the expression of the gene product encoded by this locus.

Group VIII, claim(s) 46-48, drawn to a <u>pharmaceutical composition</u> comprising a polynucleotide construct encoding RUNX3 or RUNX3 promoter activator.

The invention of Group I does not require a polynucleotide encoding Runx3 promoter activator of Group II. An international and a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single inventive concept. Where a group of inventions is claimed in an application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. See 37 C.F.R 1.475 (a). If multiple products, processes of manufacture, or uses are claimed, the first invention of the category first mentioned in the claims of the application and first recited invention of each of the other categories related thereto will be considered as the main invention in the claims. See 37 C.F.R 1.475 (d) and 37 C.F.R 1.476 (c). Accordingly, Groups I-VIII are not linked by a special technical feature.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Application/Control Number: 10/540,402

Art Unit: 1632

currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR

1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an

Page 4

election of the invention to be examined even though the requirement be traversed (37 CFR

1.143).

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Magdalene K. Sgagias whose telephone number is (571) 272-3305. The

examiner can normally be reached on Monday through Friday from 9:00 am to 5:00 pm. If

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter

Paras, Jr., can be reached on (571) 272-4517. The fax phone number for the organization

where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

Magdalene K. Sgagias, Ph.D.

Art Unit 1632

DEBORAH CROUCH PRIMARY EXAMINER

Deboral Cronels